

Service Manual

 **PIONEER**
The Art of Entertainment

ORDER NO.
RRV1628

STEREO AMPLIFIER

A-P6500

- This product is a component of a system.
Refer to the service manual RRV1627 for XS-P6500.
- This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

- XS-P6500 is a combination of the following components.

STEREO AMPLIFIER	: A-P6500
STEREO TUNER	: F-P5500RDS
COMPACT DISC PLAYER	: PD-P5500
STEREO DOUBLE CASSETTE DECK	: CT-P5500WR

Service Manual

ORDER NO.
RRV1627

SEPARATE MINI COMPONENT SYSTEM

XS-P6500

● Refer to the service manual RRV1525 for XS-P5500.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	XS-P6500		
MYIXK	○	AC220-230V	
MYXK/EA	○	AC220-230V	
MYXK/EB	○	AC220-230V	
NVXK	○	AC230V	

● XS-P6500 is a combination of the following components.

STEREO AMPLIFIER : A-P6500
STEREO TUNER : F-P5500RDS
COMPACT DISC PLAYER : PD-P5500
STEREO DOUBLE CASSETTE DECK : CT-P5500WR

- This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.
- This product is a component of a system.
For the system composition STEREO TUNER: F-P5500, COMPACT DISC PLAYER: PD-P5500 and STEREO DOUBLE CASSETTE DECK : CT-P5500WR etc., refer to the service manual RRV1525 for XS-P5500.
- This manual is applicable to STEREO AMPLIFIER: A-P6500.

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST	2	4. PCB PARTS LIST	19
2. BLOCK DIAGRAM	6	5. IC INFORMATION	22
3. SCHEMATIC AND PCB CONNECTION DIAGRAMS	7		

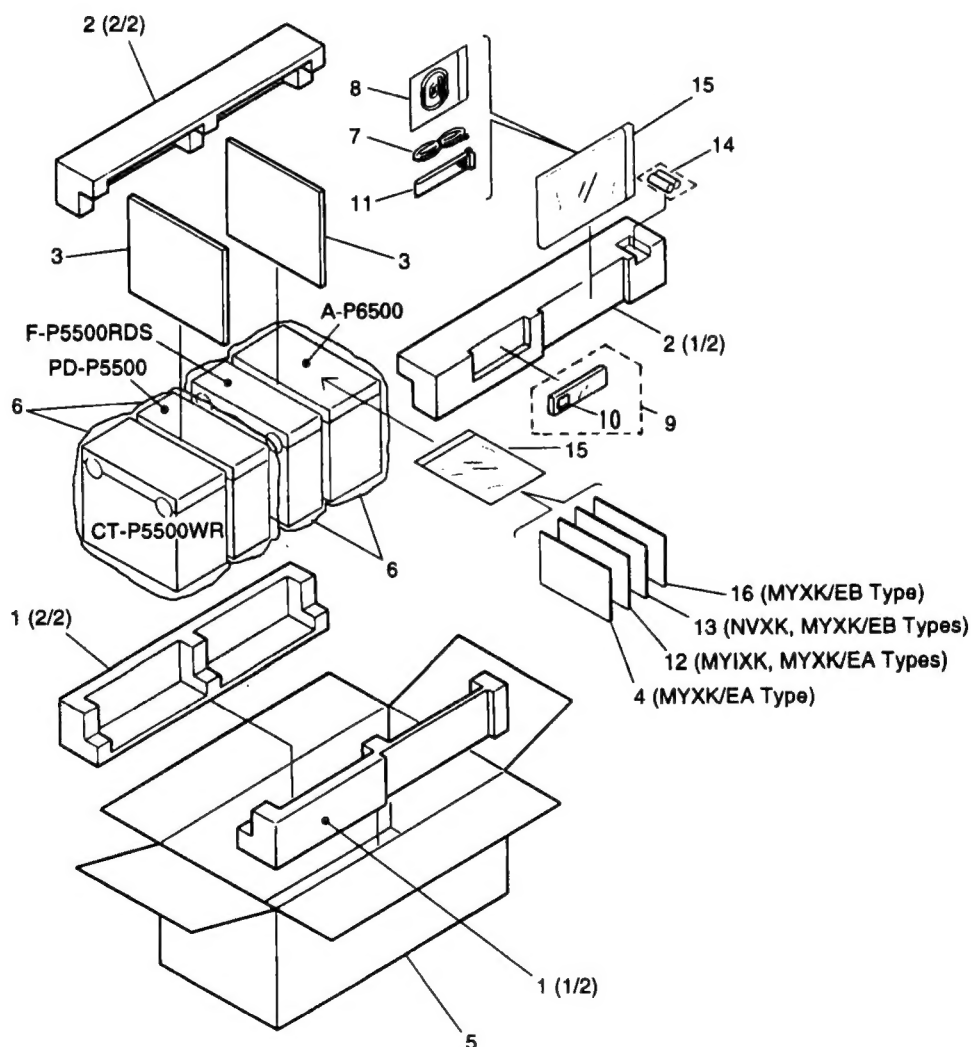
1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "©" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1.1 PACKING

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	PAD B	RHA1190		11	CONTROL CODE	RDE1041
	2	PAD T	RHA1191		12	OPERATING INSTRUCTIONS	RRD1179
	3	SPACER	RHG1713			(German/Italian)	
	4	OPERATING INSTRUCTIONS	RRD1180			(MYIXK, MYXK/EA types)	
		(French/Dutch) (MYXK/EA type)			13	OPERATING INSTRUCTIONS	RRB1171
	5	MASTER CARTON	RHG1743			(English) (NVXK, MYXK/EB types)	
				NSP	14	BATTERY (R03, AAA)	VEM-022
	6	SEAT (550x550x0.5)	Z23-026		15	POLYETHYLENE BAG	Z21-038
	7	FM ANTENNA ASSY	ADH1019			(0.03x230x340)	
	8	LOOP ANTENNA	ATB7002		16	OPERATING INSTRUCTIONS	RRD1181
	9	REMOTE CONTROL UNIT	RPX1085			(French/Swedish/Spanish/Portuguese)	
	10	BATTERY COVER	AZA7050			(MYXK/EB type)	



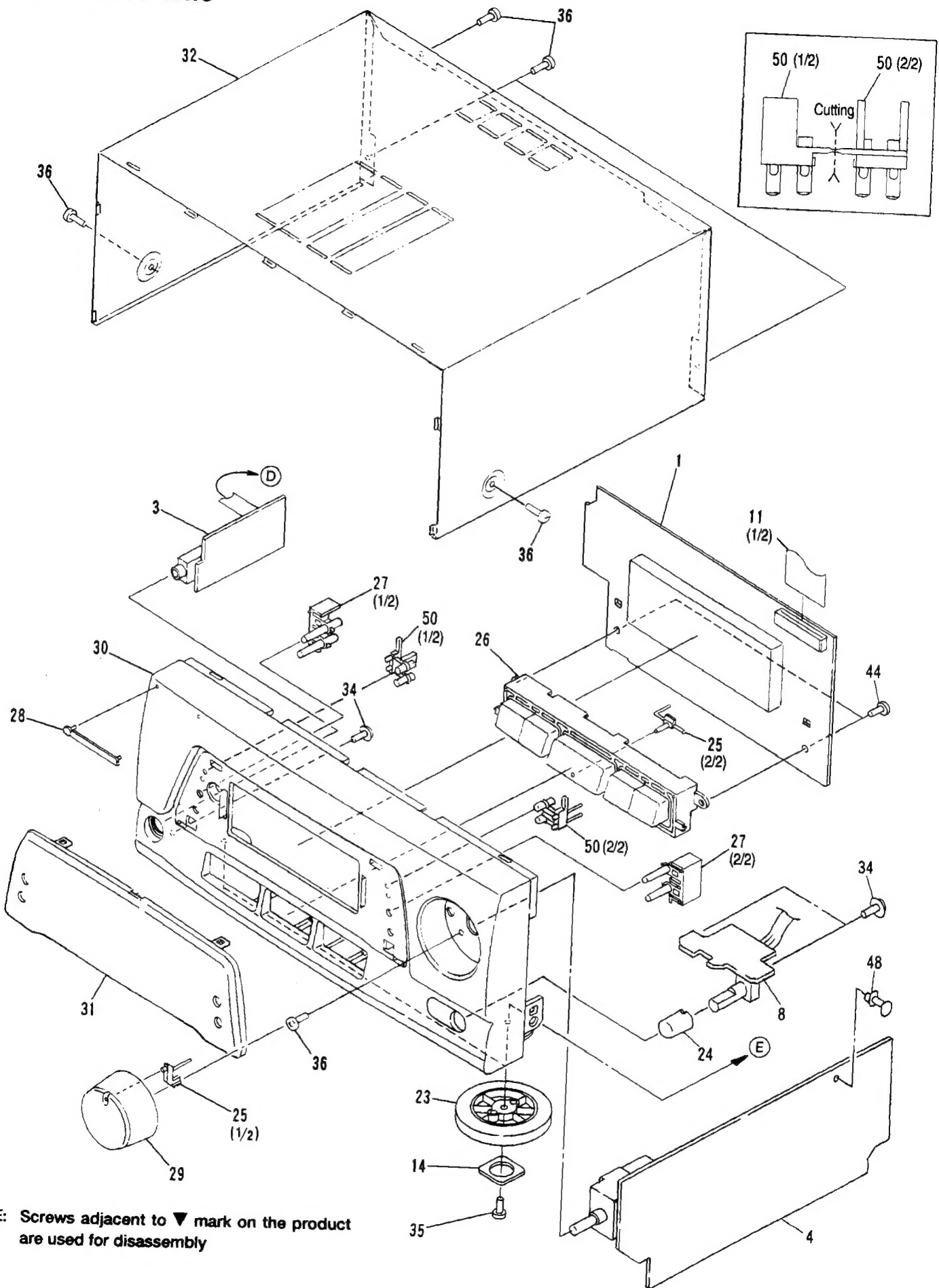
1.2 STEREO AMPLIFIER (A-P6500)

■ PARTS LIST

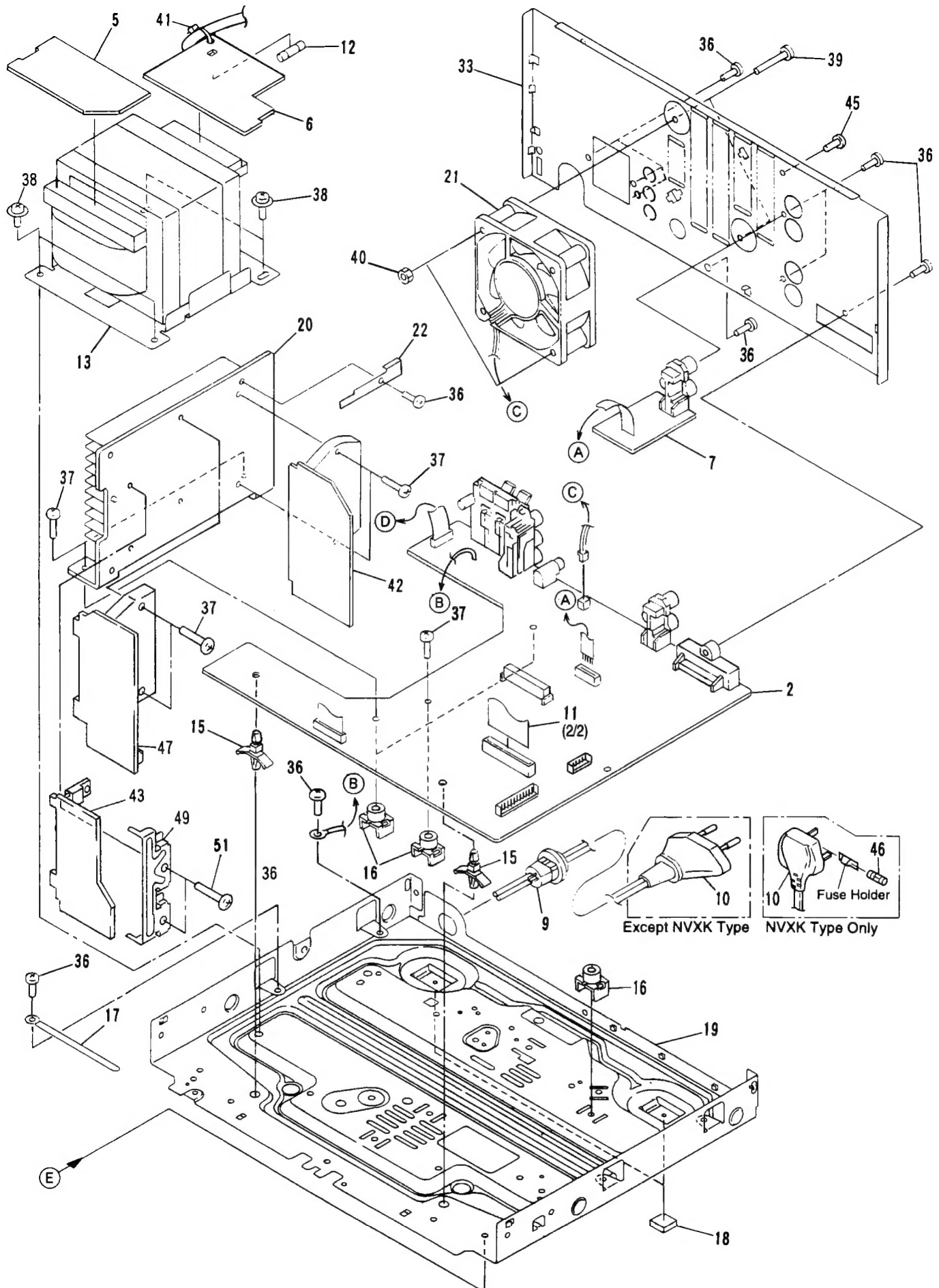
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
NSP	1	DISPLAY ASSY	RWZ3882		41	BINDER	ZCA-SKB90BK
	2	MAIN ASSY	RWZ3920		42	POWER AMP ASSY	RWZ3879
	3	H. P. ASSY	RWZ3926		43	REG. ASSY	RWZ3923
	4	VR DOL. PROLOG. ASSY	RWZ3921		44	SCREW	BPZ30P080FMC
	5	CONNECT ASSY	RWZ3924		45	SCREW	BSZ30P080FZK
NSP	6	AC. CONNECT ASSY	RWZ3925	Δ	46	FUSE (T5A) (NVXK type only)	REK1003
NSP	7	REC. OUT ASSY	RWZ3883		47	REAR POWER AMP ASSY	RWZ3922
	8	BAL. VR ASSY	RWZ3927	NSP	48	MINI CARD SPACER	REC1278
	9	STRAIN RELIEF	CM-22B	NSP	49	HOLDER	RNE1856
Δ	10	AC POWER CORD (Except NVXK type)	ADG1138		50	LOGIC LENS	RNK2193
Δ	10	AC POWER CORD (NVXK type)	PDG1055		51	SCREW	VBZ30P120FZK
	11	28P F.F.C/30V	RDD1358				
Δ	12	FUSE (T1.25A, FU2001)	ΔEK1055				
Δ	13	POWER TRANSFORMER (T1)	RTT1315				
NSP	14	FOOT SPACER	REB1296				
NSP	15	PC SUPPORT	VEC1549				
NSP	16	PCB MOLD	AMR2115				
NSP	17	CORD STOPPER	DNF1128				
	18	CUSHION B	REB1282				
NSP	19	UNDER BASE	RNB1115				
NSP	20	HEAT SINK	RNE1862				
	21	DC FAN MOTOR	AXM7003				
	22	SPRING	RBK1071				
	23	INSULATOR ASSY	VXA1881				
	24	MIC VOLUME KNOB	AAB7045				
	25	STA. LENS	AAK7118				
	26	BUTTON AM	RAC2111				
	27	TIMER BUTTON	RAC2107				
	28	NAME PLATE	PAM1407				
	29	VR KNOB	RNK2160				
	30	PANEL AM	RAH2701				
	31	D. PANEL AM	RAH2711				
	32	BONNET	REA1181				
	33	REAR BASE	RNA2074				
		(Except NVXK type)					
	33	REAR BASE (NVXK type)	RNA2081				
	34	SCREW (WITH WASHER)	ABA1005				
	35	SCREW	BBZ30P100FCC				
	36	SCREW	BBZ30P080FZK				
	37	SCREW	BBZ30P160FMC				
	38	SCREW	ASZ40P060FMC				
	39	SCREW	BMZ40P300FZK				
	40	NUT	NB40FMC				

XS-P6500

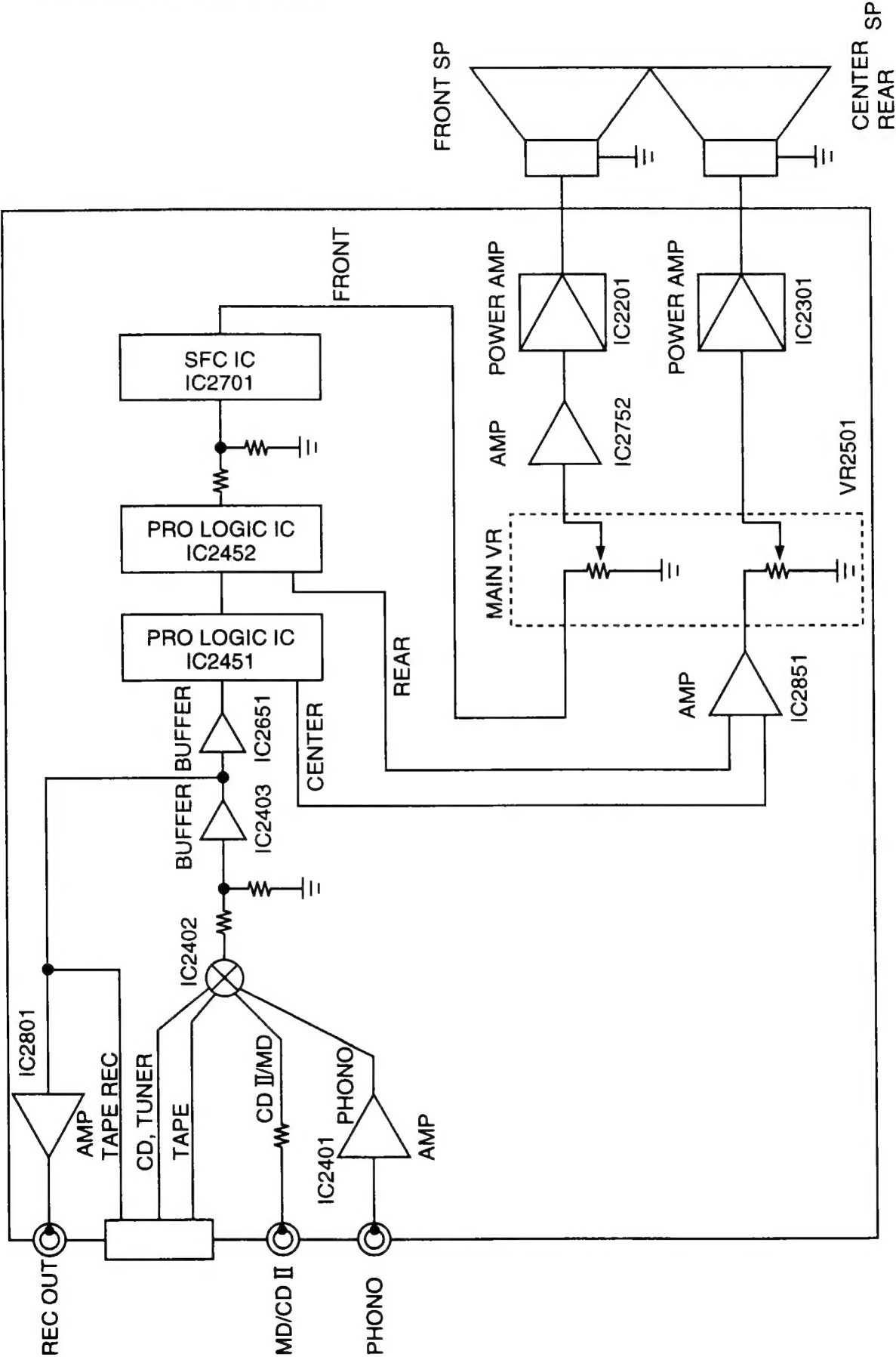
■ EXPLODED VIEWS



NOTE: Screws adjacent to ▼ mark on the product are used for disassembly



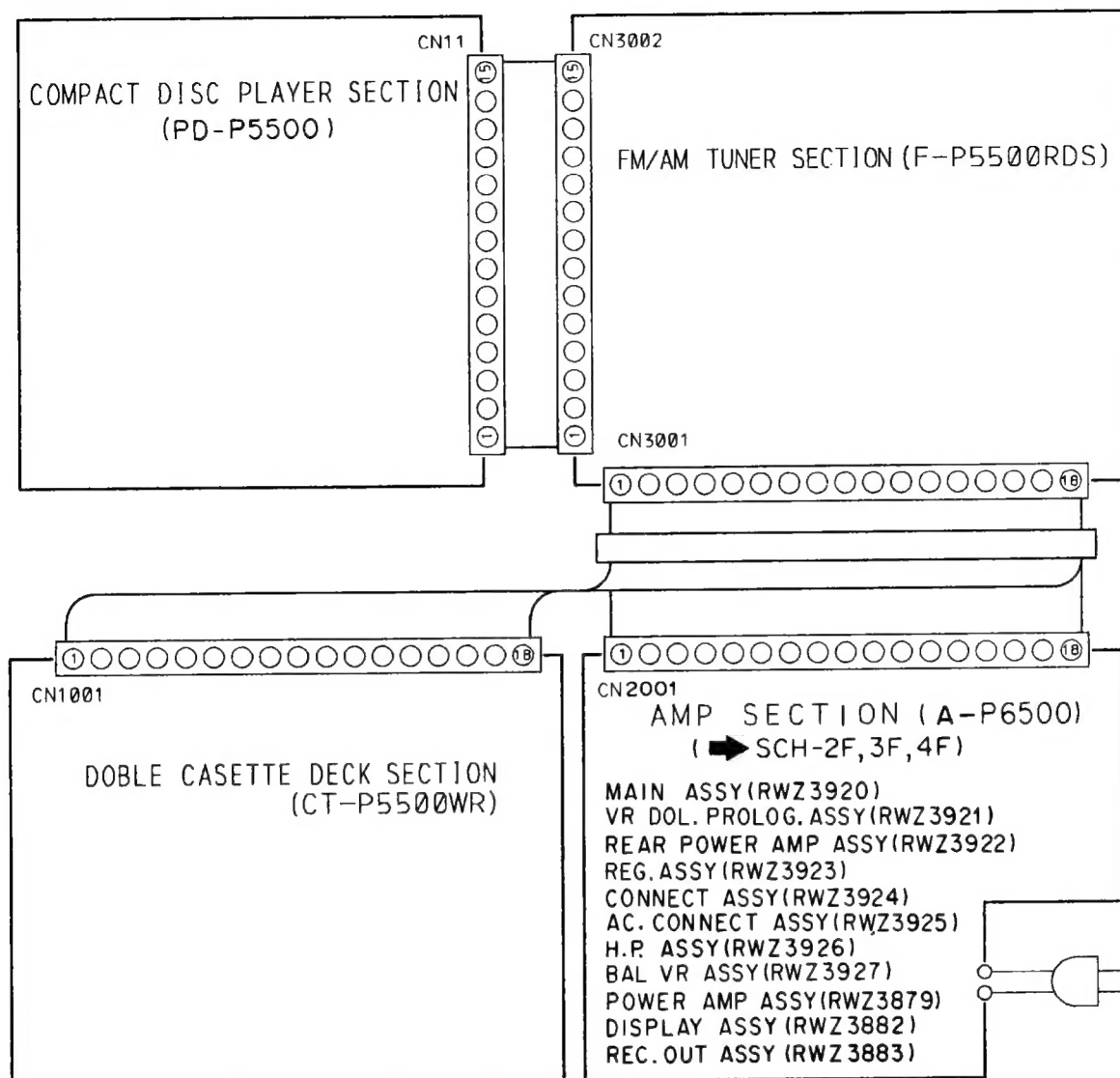
2. BLOCK DIAGRAM



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM

SCH-1F



NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. **RESISTORS:**
Unit: k: k Ω , M: M Ω , or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.

4. **CAPACITORS:**
Unit: p: pF or μ F unless otherwise noted.
Ratings: capacitor (μ F)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. **COILS:**
Unit: m: mH or μ H unless otherwise noted.

6. **VOLTAGE AND CURRENT:**
 : Signal voltage at rated output.
 or $-V$:
 DC voltage (V) at no input signal unless otherwise noted.
 Value in () is DC voltage at rated power.
 or $-mA$:
 DC current at no input signal unless otherwise noted.

7. OTHERS:

- or : Adjusting point.
- : Measurement point.
- The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SCH-□ ON THE SCHEMATIC DIAGRAM:

- SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

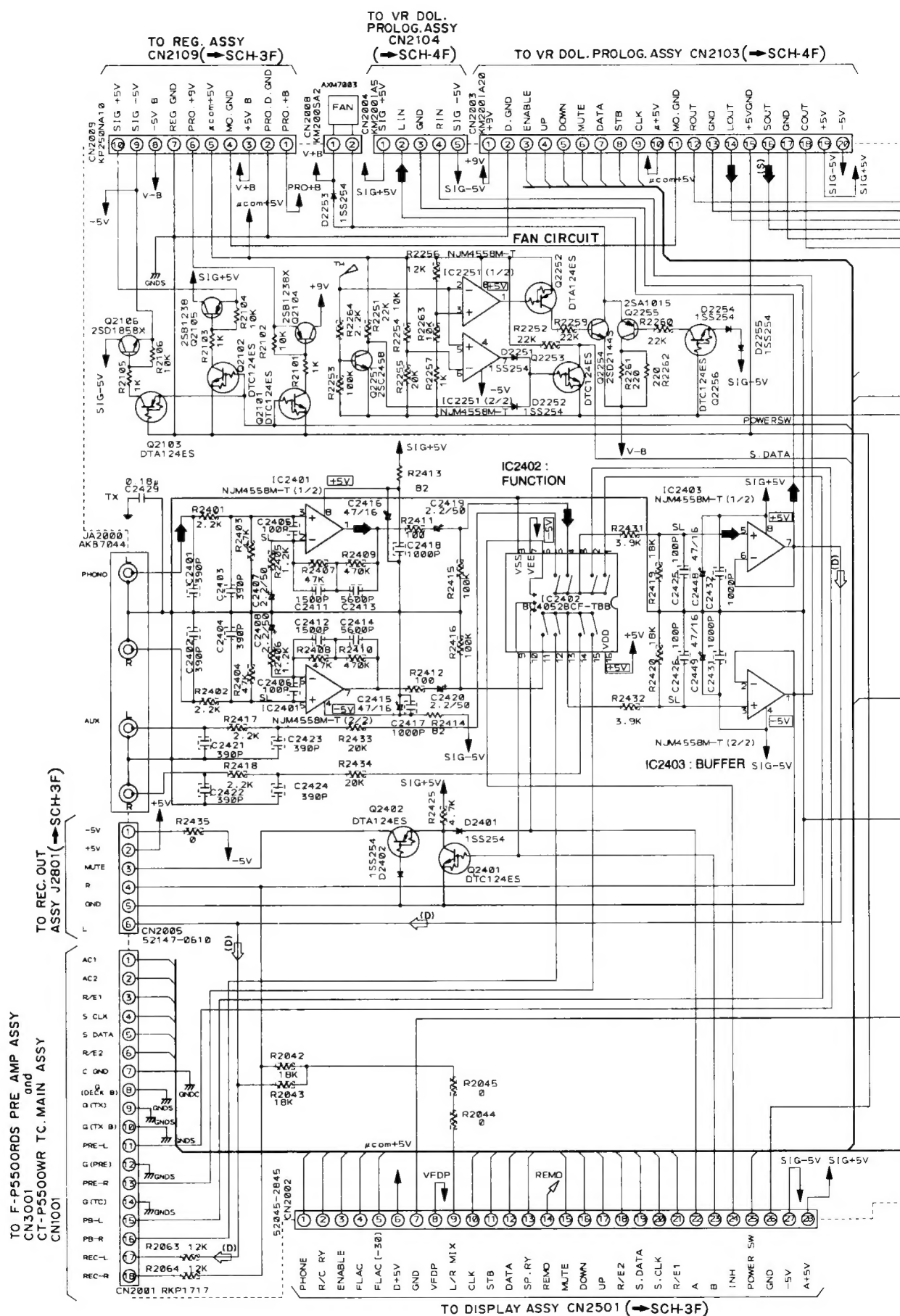
A-P6500
DISPLAY ASSY
S2501 : + UP
S2502 : - DOWN (DEMO)
S2503 : CENTER MODE
S2504 : DOLBY MODE
S2505 : POWER STANDBY/ON
S2506 : P. BASS
S2507 : SFC MODE
S2508 : TIMER REC
S2509 : WAKE-UP

SCH-1F

OVERALL
SCHEMATIC
DIAGRAMOVERALL
SCHEMATIC
DIAGRAM

SCH-1F

■ MAIN ASSY, H. P. ASSY and CONNECT ASSY





• This diagram is viewed from the mounted parts side.

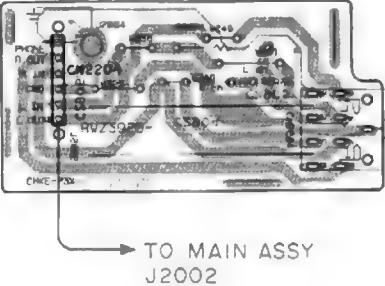
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

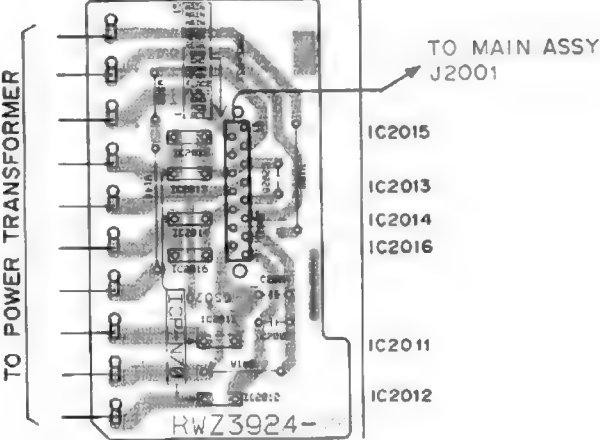
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3- terminal regulator

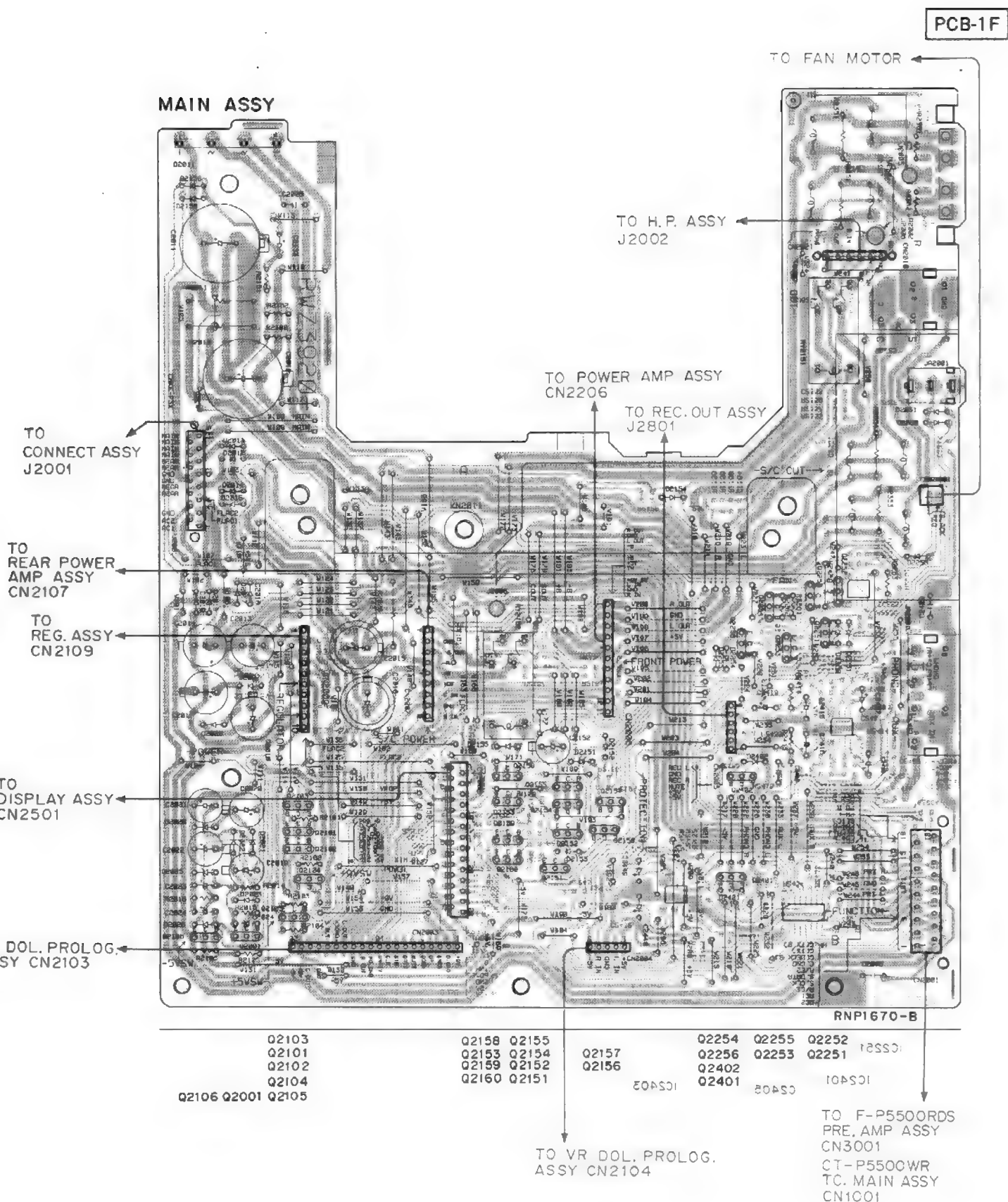
- The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

H. P. ASSY

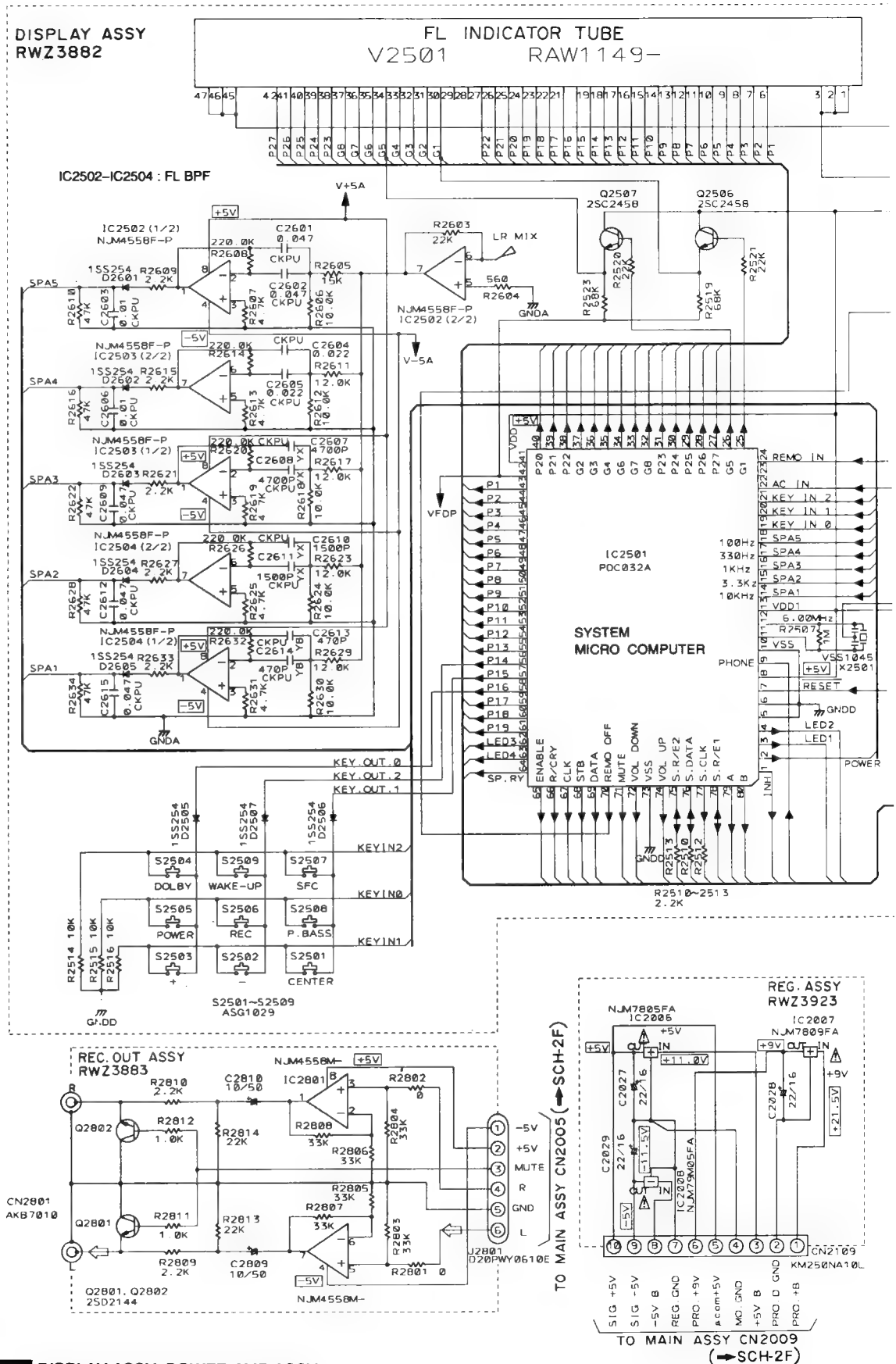


CONNECT ASSY





■ DISPLAY ASSY, POWER AMP ASSY, REC. OUT ASSY, REAR POWER AMP ASSY, AC. CONNECT ASSY, and REG. ASSY



SCH-3F

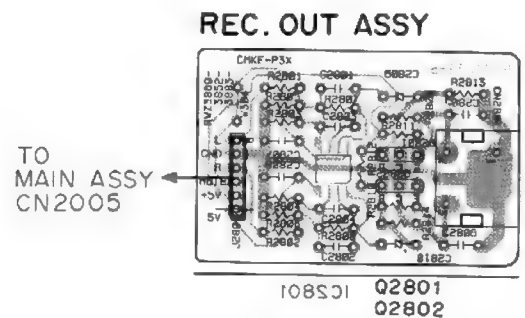
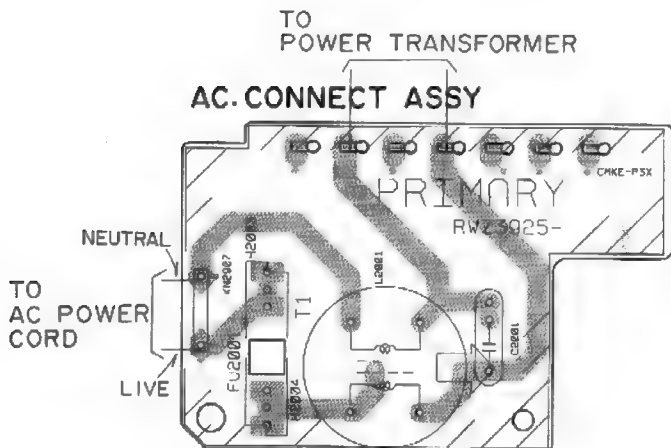
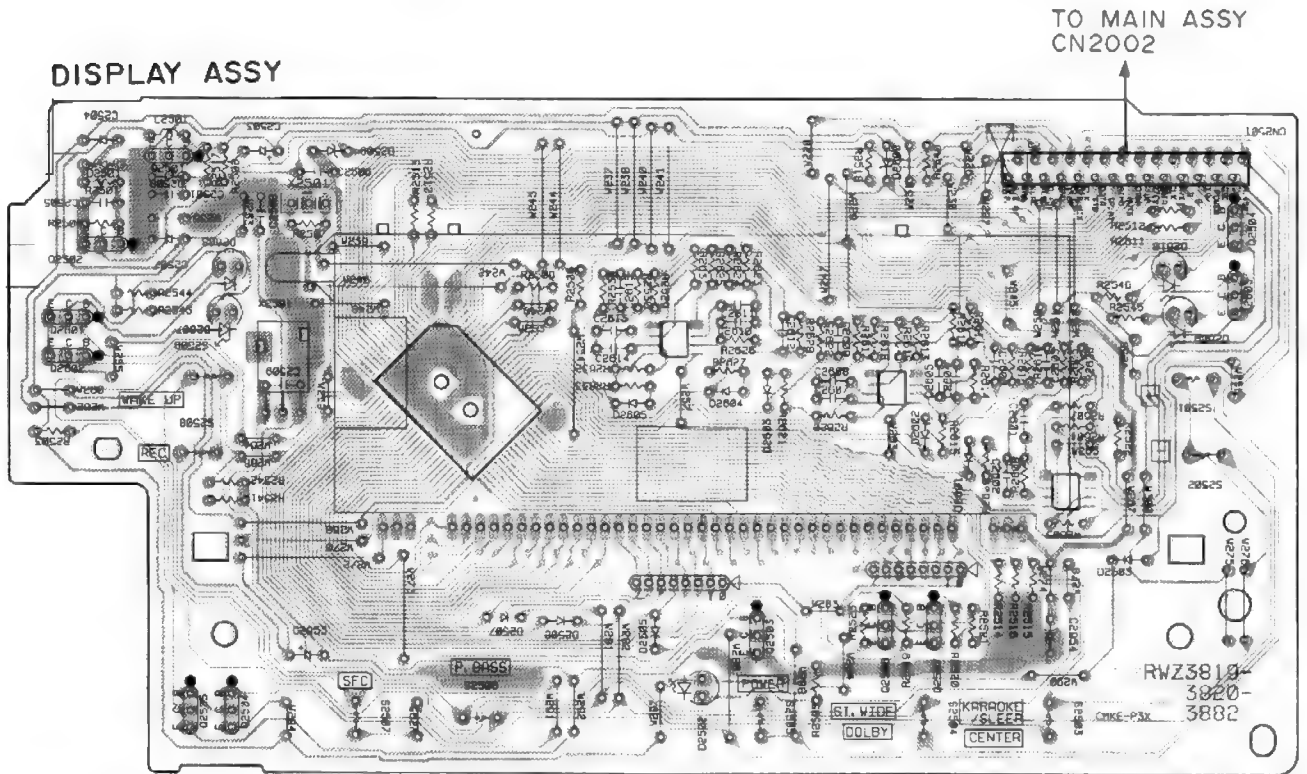
DISPLAY ASSY, POWER AMP ASSY,
REC. OUT ASSY, REAR POWER AMP ASSY,
AC. CONNECT ASSY, REG. ASSY



SCH-3F

- This diagram is viewed from the mounted parts side.

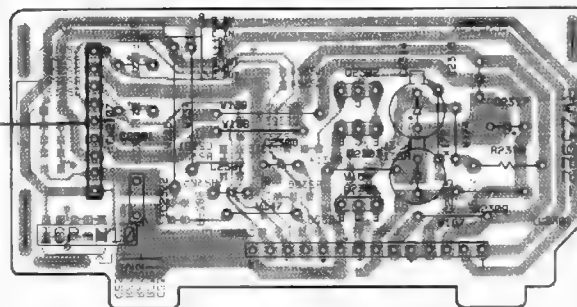
- The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.



PCB-2F

REAR POWER AMP ASSY

TO MAIN
ASSY CN2007



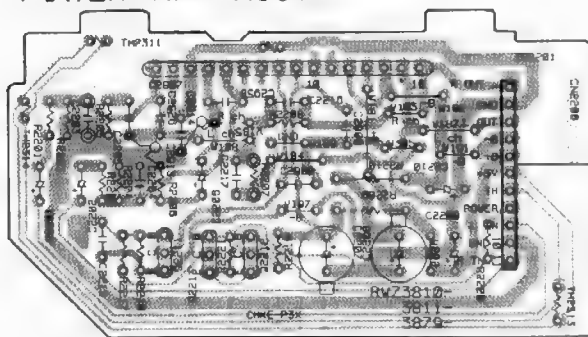
IC 2302

Q2302
Q2303
Q2301

IC2301

POWER AMP ASSY

TO
MAIN ASSY
CN2006

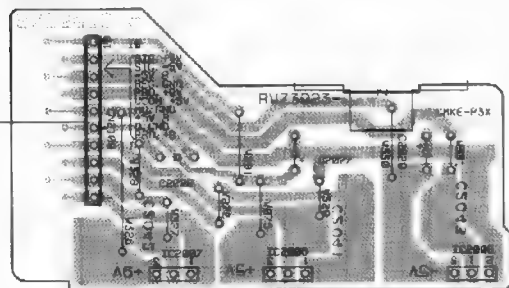


Q2211 Q2213 Q2212

IC2201

REG. ASSY

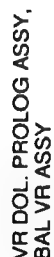
TO
MAIN ASSY
CN2009



IC2007

IC2006

IC2008



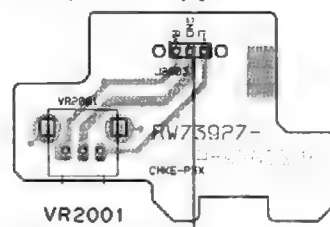
SCH-4F



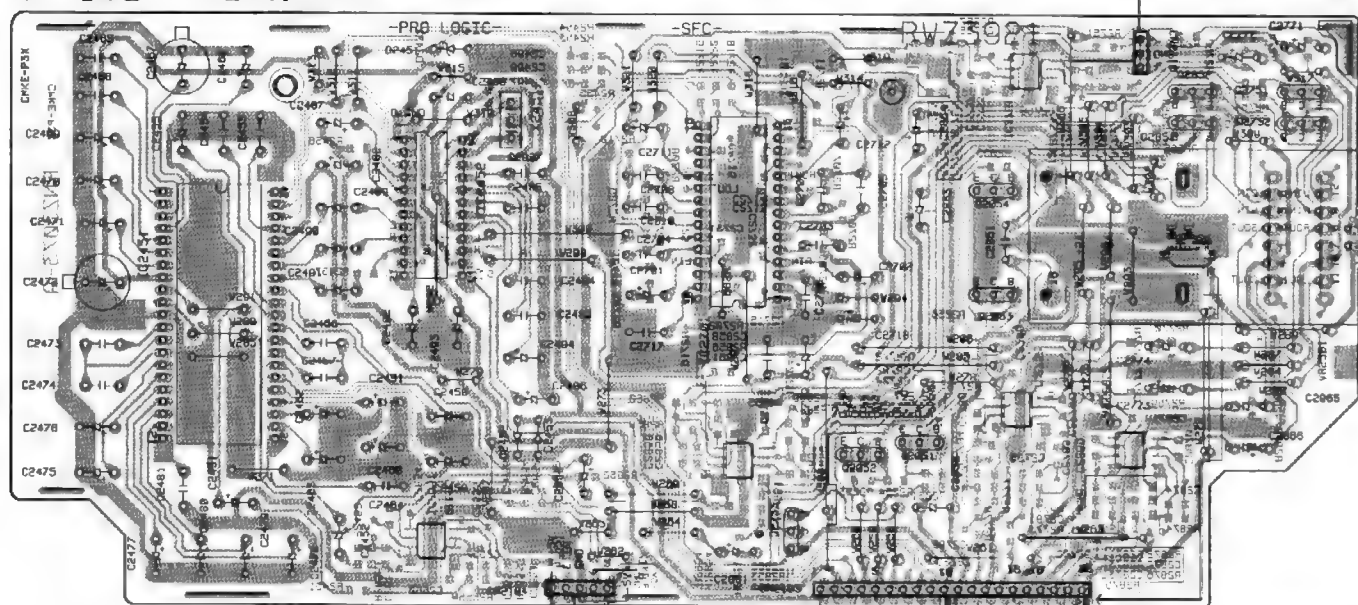
- The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

PCB-3F

BAL VR ASSY



VR DOL. PROLOG. ASSY



RNP 1670-B

VR2501

IC2451

IC2452

15551

IC2701

2753

158521

103284

Q2054

Q2053

A2854

Q285

0354

2752

TO MAIN ASSY
CN2004

TO MAIN ASSY
CN2003

4. PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).

560 Ω $\rightarrow 56 \times 10^1 \rightarrow 561$ RD1/4PU $\boxed{561} J$

47 k Ω $\rightarrow 47 \times 10^3 \rightarrow 473$ RD1/4PU $\boxed{473} J$

0.5 Ω $\rightarrow 0R5$ RN2H $\boxed{0R5} K$

1 Ω $\rightarrow 1R0$ RS1P $\boxed{1R0} K$

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 k Ω $\rightarrow 562 \times 10^1 \rightarrow 5621$ RN1/4PC $\boxed{5621} F$

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

LIST OF PCB ASSEMBLIES

NSP	DISPLAY ASSY	RWM1913
	— POWER AMP ASSY	RWZ3879
	— DISPLAY ASSY	RWZ3882
NSP	— REC. OUT ASSY	RWZ3883
NSP	AMP ASSY	RWM1926
	— MAIN ASSY	RWZ3920
	— VR DOL. PROLOG. ASSY	RWZ3921
	— REAR POWER AMP ASSY	RWZ3922
	— REG. ASSY	RWZ3923
	— CONNECT ASSY	RWZ3924
NSP	— AC. CONNECT ASSY	RWZ3925
NSP	— H. P. ASSY	RWZ3926
	— BAL VR ASSY	RWZ3927

POWER AMP ASSY

SEMICONDUCTORS

Δ	IC2201	STK401-090
	Q2213	2SA992
	Q2211, Q2212	2SC1845

CAPACITORS

C2216, C2217	CCCCH030C50
C2907, C2958	CCCSL101J50
C2209, C2210	CEAS100M50
C2207, C2208	CEAS101M50
C2205, C2206	CEAS470M25
C2201, C2202	CEASR22M50
C2215	CGCYX104M16
C2203, C2204, C2913, C2914	CKCYB471K50
C2926	CKCYB562K50
C2908, C2909	CKCYF103Z50

RESISTORS

Δ	R2209, R2210	RD1/4PMFL101J
	Other Resistors	RD1/4PU $\square\square\square J$

OTHERS

Δ	CN2206 11P PLUG	KM250NA11L
	TH2311 THERMISTOR	REX1006

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

DISPLAY ASSY

SEMICONDUCTORS

IC2502-IC2504	NJM4558M
IC2501	PDC032A
Q2502, Q2506, Q2507	2SC2458
Q2504	DTA124ES
Q2501, Q2503, Q2505, Q2601-Q2604	DTC124ES

D2501, D2503, D2505-D2507	1SS254
D2601-D2605	1SS254
D2508, D2509	MTZJ6.2B
D2609, D2610	SLR-342MCT31
D2502, D2607, D2608	SLR-342VRT31

COILS AND FILTERS

L2501	LAU101J
-------	---------

SWITCHES AND RELAYS

S2501-S2509	ASG1029
-------------	---------

CAPACITORS

C2504	CEJA010M50
C2507	CEJA220M50
C2503	CEJAR15M50
C2505	CFTXA224J50
C2509	CKPUYB101K50

C2506, C2613, C2614	CKPUYB471K50
C2603, C2606	CKPUYF103Z25
C2604, C2605	CKPUYF223Z25
C2501, C2508, C2601, C2602, C2609	CKPUYF473Z16
C2612, C2615	CKPUYF473Z16

C2610, C2611	CKPUYX152M16
C2607, C2608	CKPUYX472M16

RESISTORS

All Resistors	RD1/4PU $\square\square\square J$
---------------	-----------------------------------

OTHERS

CN2501 28P FFC CONNECTOR	52044-2845
REMOTE RECEIVER UNIT	GP1U27X
V2501 FL INDICATOR TUBE	RAW1149
X2501 CERAMIC RESONATOR (6.00MHz)	VSS1045

XS-P6500

Mark	No.	Description	Parts No.
REC. OUT ASSY			
SEMICONDUCTORS			
	IC2801		NJM4558M
	Q2801, Q2802		2SD2144S
CAPACITORS			
	C2809, C2810		CEAS100M50
RESISTORS			
	All Resistors		RD1/4PU□□□J
OTHERS			
	CN2801 2P PIN JACK (REC. OUT)		AKB7010
MAIN ASSY			
SEMICONDUCTORS			
	IC2402		BU4052BCF
	IC2251, IC2401, IC2403		NJM4558M
	Q2255		2SA1015
	Q2157		2SA1048
▲	Q2001		2SB1238X
	Q2104, Q2105		2SB1238X
	Q2151, Q2153-Q2155, Q2159, Q2160		2SC2458
	Q2251		2SC2458
	Q2106		2SD1858X
	Q2254		2SD2144S
	Q2103, Q2152, Q2252, Q2402		DTA124ES
	Q2158		DTA143ES
	Q2101, Q2102, Q2253, Q2256, Q2401		DTC124ES
	D2024, D2030, D2031, D2151-D2155		1SS254
	D2251-D2255, D2401, D2402		1SS254
▲	D2011		D3SBA20(B)
	D2026		MTZJ10B
	D2025		MTZJ30B
▲	D2012-D2023, D2027, D2028, D2156		S5688G
COILS AND FILTERS			
	L2351-L2356 (5.3μH)		ATH-059
SWITCHES AND RELAYS			
	RY2151, RY2152		ASR7007
CAPACITORS			
	C2025 (0.01μF/150V)		ACG1005
	C2034, C2405, C2406, C2425, C2426		CCSQSL101J50
	C2019-C2022		CEAS101M50
	C2013, C2014		CEAS102M16
	C2015, C2016		CEAS102M25
	C2023		CEAS220M50
	C2152		CEAS221M16
	C2011, C2012		CEAS222M50
	C2153, C2407, C2408, C2419, C2420		CEAS2R2M50
	C2415, C2416, C2448, C2449		CEAS470M16
	C2024		CEAS470M50
	C2017, C2018		CEAS471M35
	C2429		CFTXA184J50
	C2351-C2359, C2365, C2366		CKSQYB102K50

Mark	No.	Description	Parts No.
	C2417, C2418, C2431, C2432		CKSQYB102K50
	C2411, C2412		CKSQYB152K50
	C2401-C2404, C2421-C2424		CKSQYB391K50
	C2033		CKSQYB471K50
	C2413, C2414		CKSQYB562K50
	C2361-C2364		CKSQYF473Z50
RESISTORS			
	R2351-R2354		RD1/4PMFL101J
	R2361, R2362		RD1/4PU100J
	R2101, R2103, R2105		RD1/4PU102J
	R2102, R2104, R2106, R2263		RD1/4PU103J
	R2151		RD1/4PU122J
	R2152		RD1/4PU203J
	R2261, R2262		RD1/4PU221J
	R2014		RD1/4PU272J
	R2016		RD1/4PU472J
	R2413, R2414		RD1/4PU820J
	R2011, R2012		RS2LMFR22J
	Other Resistors		RS1/10S□□□J
OTHERS			
	2011 6P CABLE HOLDER		51052-0600
	CN2002 28P FFC CONNECTOR		52045-2845
	CN2005 6P JUMPER CONNECTOR		52147-0610
	2010 3P PIN JACK (REAR/CENTER)		AKB1120
	JA2000 4P PIN JACK (PHONO, MD/CD2)		AKB7044
	CN2003 20P PLUG		KM2001A20
	CN2004 5P PLUG		KM2001A5
	CN2009 10P SOCKET		KP250NA10
	CN2006 11P SOCKET		KP250NA11
	CN2007 9P SOCKET		KP250NA9
	JA2002 4P SPEAKER TERMINAL		RKE1006
	JA2001 REMOTE CONTROL JACK		RKN1004
	CN2001 18P SOCKET		RKP1717
	PCB BINDER		VEF1008
	KN2011 EARTH METAL FITTING		VNF1084

VR DOL. PROLOG. ASSY

SEMICONDUCTORS			
	IC2451		LA2785
	IC2452		LV1011
	IC2651, IC2752, IC2851		NJM4558M
	IC2701		PM0006A
	Q2051, Q2052		2SA1015
	Q2053, Q2054		2SC1815
	Q2751, Q2752, Q2851, Q2852		2SC2458
	Q2753		DTA124ES
	D2452, D2453		1SS254
	D2451		MTZJ5.6B
CAPACITORS			
	C2779-C2782, C2855, C2856		CCSQSL101J50
	C2463, C2480		CEANL3R3M50
	C2459, C2461, C2476, C2478		CEANL4R7M50
	C2486, C2489-C2491		CEAS010M50
	C2451, C2452, C2468-C2471, C2492		CEAS100M50

Mark	No.	Description	Parts No.
	C2701, C2702, C2711, C2712 C2718, C2719, C2851, C2852 C2482, C2493, C2494 C2052 C2467, C2472, C2488	CEAS100M50 CEAS100M50 CEAS101M10 CEAS220M10 CEAS221M10	
	C2487, C2773, C2774, C2863-C2866 C2455 C2462, C2479 C2458, C2460, C2475, C2477 C2456, C2457, C2473, C2474	CEAS2R2M50 CEAS470M10 CEASR15M50 CEASR47M50 CFTYA104J50	
	C2464, C2481 C2483, C2485 C2454 C2051 C2659, C2660, C2853, C2854	CFTYA154J50 CFTYA333J50 CFTYA474J50 CGCYX104M16 CKSQYB102K50	
	C2857, C2858, C2861, C2862 C2725 C2859, C2860 C2783, C2784 C2731, C2732	CKSQYB102K50 CKSQYB152K50 CKSQYB221K50 CKSQYB223K50 CKSQYB391K50	
	C2787, C2788 C2713-C2715 C2785, C2786 C2708, C2710, C2720, C2721 C2703, C2704	CKSQYB821K50 CKSQYF104Z25 CKSQYF473Z25 CQMA102J50 CQMA103J50	
	C2484 C2465 C2466 C2717 C2453	CQMA152J50 CQMA223J50 CQMA473J50 CQMA562J50 CQMA681J50	
	C2705, C2707	CQMA683J50	
RESISTORS			
	VR2501 (100 k Ω) Other Resistors	ACX7001 RS1/10S□□□J	
OTHERS			
	CN2110 3P JUMPER CONNECTOR X2451 CERAMIC RESONATOR (8.00MHz) CN2103 20P SOCKET CN2104 5P SOCKET PCB BINDER	52147-0310 DSS1053 KP2001A20L KP2001A5L VEF1008	
REAR POWER AMP ASSY			
SEMICONDUCTORS			
Δ	IC2301 Q2303 Q2301, Q2302	STK405-030A 2SA992 2SC1845	
CAPACITORS			
	C2320, C2321 C2305, C2306 C2316, C2317 C2314, C2315 C2307, C2308	CCSQSL030C50 CCSQSL101J50 CEAS100M50 CEAS101M25 CEAS470M25	
	C2303, C2304, C2327, C2328 C2322, C2323 C2318	CKSQYB471K50 CKSQYF103Z50 CKSQYF104Z50	

Mark	No.	Description	Parts No.
	C2309-C2312		CKSQYF473Z50
RESISTORS			
Δ	R2309, R2310 Other Resistors		RD1/4PMFL101J RS1/10S□□□J
OTHERS			
	CN2107 9P PLUG		KM250NA9L
REG. ASSY			
SEMICONDUCTORS			
Δ	IC2006 IC2007 IC2008		NJM78M05FA NJM78M09FA NJM79M05FA
CAPACITORS			
	C2027-C2029		CEAS220M16
OTHERS			
	CN2109 10P PLUG		KM250NA10L
CONNECT ASSY			
SEMICONDUCTORS			
Δ	IC2011-IC2014		ICP-N70
CAPACITORS			
	C2026 (0.01 μ F/150V) C2003, C2004		ACG1005 CKCYB222K50
AC. CONNECT ASSY			
COILS AND FILTERS			
Δ	L2001		ATF-151
CAPACITORS			
Δ	C2001 (10000pF/250V)		ACG7020
OTHERS			
	H2003, H2004 FUSE CLIP		AKR1003
H. P. ASSY			
RESISTORS			
	R2971, R2972		RS2LMF331J
OTHERS			
	6P CABLE HOLDER CN2204 MINI JACK		51052-0600 RKN1029
BAL VR ASSY			
RESISTORS			
	VR2001 (250 k Ω)		RCS1037
OTHERS			
	3P CABLE HOLDER		51048-0300

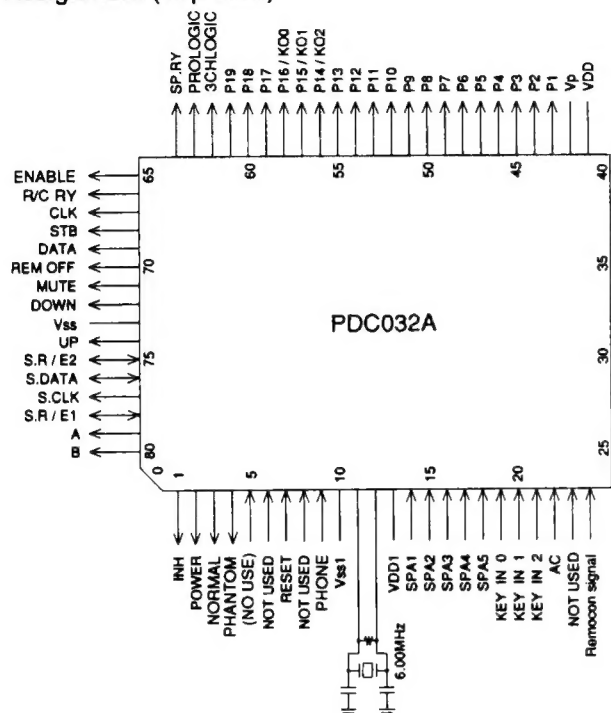
5. IC INFORMATION

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

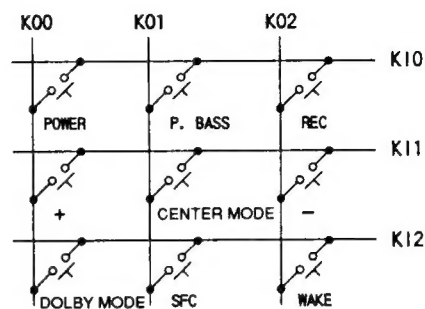
■ PDC032A (DISPLAY ASSY: IC2501)

● System Control Micro-computer

● Pin Assignment (Top view)



● Key Matrix



● Pin Function

No.	Pin Name	Pin Function	I/O	Description	Logic
1	P17	INH	O	BU4052 function INHIBIT output	H
2	P30	POWER	O	Power control output	H
3	P31	NORMAL	O	PRO-LOGIC NORMAL mode LED display output	H
4	P32	PHANTOM	O	PRO-LOGIC PHANTOM mode LED display output	H
5	P33	NOT USED	I	Not used (Fix to H or L)	
6	P70	NOT USED	I	Not used (internal pull-up)	
7	RES	RESET	I	Reset input	
8	P74	NOT USED	I	Not used (Connected to +5V.)	
9	P75	PHONE	I	Headphone detector terminal	
10	VSS1	VSS	—	Connected to GND.	
11	CF1	—	—	Main System clock (6MHz) Connected to ceramic resonator.	
12	CF2	—	—		
13	VDD1	VDD	—	Connected to +5V.	
14	AN0	SPA1	I	Spectrum analyzer input (analog) 10 kHz	
15	AN1	SPA2	I	Spectrum analyzer input (analog) 3.3 kHz	

No.	Pin Name	Pin Function	I/O	Description	Logic
16	AN2	SPA3	I	Spectrum analyzer input (analog) 1 kHz	
17	AN3	SPA4	I	Spectrum analyzer input (analog) 330 Hz	
18	AN4	SPA5	I	Spectrum analyzer input (analog) 100 Hz	
19 21	P85 P87	KI0 KI2	I	Key scan · Key return input 0 Key scan · Key return input 2	
22	INT1	AC	I	AC pulse input	
23	P72	NOT USED	I	Not used (internal pull-up)	
24	INT3	RMC	I	Remote control signal input	
25	S0	G1	O	FL grid output G1	
26	S1	G5	O	FL grid output G5	
27 31	S2 S6	P27 P23	O	FL segment output P27 FL segment output P23	
32 34	S7 S9	G8 G6	O	FL grid output G8 FL grid output G6	
35 37	S10 S12	G4 G2	O	FL grid output G4 FL grid output G2	
38 40	S13 S15	P22 P20	O	FL segment output P22 FL segment output P20	
41	VDD2	VDD	—	Connected to +5V.	
42	VP	VFDP	—	Connected to power supply (–30V) for FL.	
43 55	S16 S28	P1 P13	O	FL segment output P1 FL segment output P13	
56 58	S29 S31	P14/KO2 P16/KO0	O	FL segment output P14 · Key scan output 2 FL segment output P16 · Key scan output 0	
59 61	S32 S34	P17 P19	O	FL segment output P17 FL segment output P19	
62	PE3	3CHLOGIC	O	DOLBY 3CH LOGIC mode LED display output	H
63	PE4	PROLOGIC	O	DOLBY PRO LOGIC mode LED display output	H
64	PE5	SP. RY	O	Front speaker relay output	H
65	P00	ENABLE	O	LA2785/LV1010 ENABLE output	H
66	P01	R/C RY	O	Rear and center speaker relay output	H
67	P02	CLK	O	PM0006A/LA2785/LV1010 clock output	

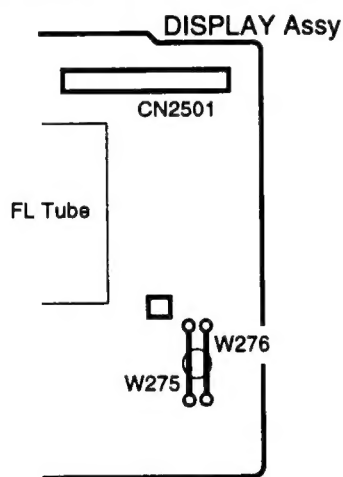
No.	Pin Name	Pin Function	I/O	Description	Logic
68	P03	STB	O	PM0006A strobe output	
69	P04	DATA	O	PM0006A/LA2785/LV1010 data output	
70	P05	REMO	O	Remote control out (MD/CD2) control output	L
71	P06	MUTE	O	Mute output	H
72	P07	DOWN	O	Volume Motor control output (DOWN)	L
73	VSS2	VSS	—	Connected to GND.	
74	P10	UP	O	Volume Motor control output (UP)	L
75	P11	S. R/E2	I/O	Communication request/enable input/output 2 for system bus communication.	
76	P12	S. DATA	I/O	Data input/output for system bus communication.	
77	P13	S. CLK	O	Clock output for system bus communication.	
78	P14	S. R/E1	I/O	Communication request/enable input/output 1 for system bus communication.	
79	P15	A	O	BU4052 function switch A output	
80	P16	B	O	BU4052 function switch B output	

● Use of Service Mode

This is used to check external input (MD/CD2, PHONO) for the amplifier by itself.

How to enter the service mode

1. With the plug pulled from the power outlet, short-circuit (W275 and W276) the service terminal on the DISPLAY assy.



KEY	Mode	Indication	FUNC A	FUNC B
[WAKE UP]	MD/CD2	Au	H	L
[TIMER REC]	PHONO	PH	H	H
[+]	DECK	dE	L	L
[-]	CD(TX)	Cd	L	H

Table 1 Front Panel Key Operation and Function Mode

The other front keys [SFC], [P. BASS], [DOLBY MODE] and [CENTER MODE] operate normally.

Service mode cancellation

Switch off the power once and then switch is on again normally. The function set in service mode remains memorized until the plug is pulled out of the power outlet.

Notes)

1. Always use this mode only for the amplifier by itself. (System operation does not operate normally.)
2. After cancellation of service mode according to the above method, the FL indication becomes **DISPLAY OFF** mode (the mode where the spectrum analyzer and the level meter part are not displayed).
For display of spectrum analyzer and level meter, push the [+] key of the unit in **POWER-OFF** condition to switch the **DISPLAY** mode.

2. Maintain the condition of "1" and supply AC power.
The power will be switched on automatically and the function will become MD/CD2. The present function status will be displayed in the 7-segment time column of the front FL.
3. After power ON, remove the terminal short-circuit bridge. (Otherwise key operation can not be executed.)
4. The function status can be changed by body key operation.
The relation between key operation and FL display is shown in Table 1.

■ STK405-030A (REAR POWER AMP ASSY : IC2301)
Audio Power IC

● Block Diagram

